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Remarks

In the Office Action mailed on May 4, 2006, the Examiner objected to certain informalities in claims 1, 23, 27, and 32.

Claims 1, 23, 27, and 32 have been amended to address the Examiner's objections.

The Examiner also rejected claims 1-7 and claims 27-34 under 35 U.S.C. 102(b) as being anticipated by Kirchoff et al., U.S. Patent No. 3,972,545.

In response, Applicants believe that claim 1 is not anticipated by Kirchoff et al. '545 because the reference does not disclose all of the elements recited in the claim. Tube 34 of the cited reference does *not* disclose "...a plurality of apertures formed in said outer peripheral wall", as recited in claim 1. The wall of tube 34 of the reference is ruptured *after* activation of the gas generator. Until the wall is ruptured after activation of the gas generator, there are no openings in the wall. Thus, the reference does *not* show "...a plurality of apertures formed in said outer peripheral wall...." of the booster cup, as set forth in claim 1.

In addition, the gas generator of Kirchoff et al. '545 does not disclose all of the following features recited in amended claim 1:

"...a filter abutting said booster cup end surface;  
a perforated disc abutting said filter; and  
a nozzle positioned at an end of said inflator and abutting said perforated disc for supplying an inflation gas to an inflatable restraint system."

As seen in FIG. 2 of the present application, the filter recited 38 described in claim 1 abuts an end surface of booster cup 22. A perforated disc 30 abuts filter 38, and nozzle 36 abuts perforated disc 30. Thus, the nozzle of the present invention abuts the perforated disc which abuts the filter which abuts the booster cup. The Examiner states that:

"Kirchoff et al. disclose an inflator (including #5) able to be used with an inflatable restraint system (for example, an airbag), comprising:  
...Nozzle (including #12) abutting perforated disc (best seen in figure)."

However, the adapter 12 shown in Kirchoff et al. '545 does not abut a perforated disc which abuts a filter which, in turn, abuts an end surface of a booster cup, as set forth in amended claim 1 of the present application. The adapter 12 appears to abut a perforated annulus 33, but this annulus does not abut a filter which abuts an end surface of a booster cup, as set forth in amended claim 1.

For the reasons set forth above, Kirchoff et al. '545 does not disclose all of the elements recited in amended claim 1 of the present application. Thus, the rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by Kirchoff et al. '545 should be withdrawn.

Furthermore, for the reasons set forth above with respect to amended claim 1, claims 7, 27, and 30 of the present application are not anticipated by Kirchoff et al. '545. More particularly, Kirchoff et al. '545 does not disclose an inflator including "...a filter abutting said booster cup end surface; a perforated disc abutting said filter;

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and a nozzle positioned at said second end of said body and abutting said perforated disc..." as recited in claim 7. Also, the reference does not disclose an inflator module including a booster cup "...having an outer peripheral wall partially defining an annular space and a plurality of apertures formed in said outer peripheral wall..." as recited in claim 27. Similarly, the reference does not disclose an inflator module including "...a filter positioned in said inflator abutting an end portion of said booster cup for securing said propellant charge in said space; a perforated disc abutting said filter; and a nozzle positioned at an end of said inflator and abutting said perforated disc..." as recited in claim 27. Also, Kirchoff et al. '545 does not disclose a method of manufacturing a gas generator comprising steps including "...inserting a filter member into the inflator body up to a point at which the filter bears against an end surface of the booster cup; positioning a perforated disc abutting said filter; and positioning a nozzle member in the inflator body at a selected axial position and abutting said perforated disc..." as recited in claim 30. Thus, the rejections of independent claims 7, 27, and 30 under 35 U.S.C. 102(b) as being anticipated by Kirchoff et al. '545 should also be withdrawn.

The Examiner also rejected claims 14 and 22-26 under 35 U.S.C. 103(a) as being unpatentable over Schneider et al., U.S. Patent No. 6,279,945, in view of Kirchoff et al. '545.

Applicant believes that claim 14 is unobvious in view of any combination of Schneider et al. '945 and Kirchoff et al. '545 because, even if the references were combined, no combination of the references would provide all of the features recited in claim 14. Specifically, no combination of the cited references would provide an inflatable restraint system having an inflator body with "...a filter positioned in said inflator body abutting an end portion of the booster cup, said filter securing said propellant charge in said space; a perforated disc *abutting said filter*; and a nozzle member proximate said second end of said inflator body *and abutting said perforated disc...*" as recited in claim 14 (emphasis added). Thus, the rejection of claim 14 under 35 U.S.C. 103(a) as being unpatentable over Schneider et al. '945 in view of Kirchoff et al. '545 should be withdrawn.

Applicant also believes that claim 23 is unobvious in view of any combination of Schneider et al. '945 and Kirchoff et al. '545 because, even if the references were combined, no combination of the references would provide all of the features recited in claim 23. Specifically, no combination of the cited references would provide an inflatable airbelt system including "...a filter abutting said booster cup end surface; a perforated disc *abutting said filter*; and a nozzle positioned at an end of said inflator *and abutting said perforated disc...*" as recited in claim 23. Thus, the rejection of claim 23 under 35 U.S.C. 103(a) as being unpatentable over Schneider et al. '945 in view of Kirchoff et al. '545 should be withdrawn.

The Examiner also responded to Applicant's argument in response to the rejection of claim 9, set forth in Applicant's amendment dated August 4, 2006.

In the previous Office Action, the Examiner rejected claim 9 under 35 U.S.C. 102(b) as being anticipated by Kirchoff et al. '545 and also as being anticipated by Ruckdeschel et al. '583. In response to Applicants' reply, the Examiner cites a portion of MPEP §2125 which states:

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"[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes *if the specification is completely silent on the issue.*". However, the description of the article pictured can be relied on, in combination with the drawings, for what they would reasonably teach one of ordinary skill in the art. In re Wright, 569 F.2d 1124, 193 USPQ 332 (CCPA 1977)." (emphasis added)

However, the above-cited passage makes it clear that the drawings must be considered *in conjunction with* the description of the device. The description of the present invention sets forth specific considerations affecting the length of the filter 38. Page 4, last paragraph, continuing into page 5 of the present specification states:

"A cylindrical filter 38, preferably a metallic mesh filter, is positioned in inflator body 12, and filters particulate materials generated by the combustion of propellant charges 18 and 28. Filter 38 fills a volume of the housing 12 defined by the cross-section of filter 38 (shown in Figure 6) spanning from a point 11 to a second point 12. The longitudinal distance defined by the distance between 11 and 12 ranges from about one-fourth to one half of the total length of housing 12, or IT. *Adjustment of the length of the filter 38 therefore increases or reduces the pressure of the gas at the second end 13 and as such, may function as a filter, a gas pressure throttle, and/or a heat sink depending on design criteria.*"

(emphasis added). In contrast, there is nothing in the descriptions of either Kirchoff et al. '545 or Ruckdeschel et al. '583 relating to the dimensions of the filter, the reasons for specifying a filter having a particular size, or the reasons for varying (or enabling variation of) the length of the filter. Thus, as the descriptions of the cited references are silent on the issue of the size of the filter relative to the size of the inflator body, the drawings in the references cannot be relied upon to show the precise proportions of the objects depicted therein. In view of this, Applicants submit that the Examiner's rejections of claim 9 under 35 U.S.C. 102(b) as being anticipated by Kirchoff et al. '545 and also as being anticipated by Ruckdeschel et al. '583 are unsupported.

The inflator of the present invention provides important advantages over the devices disclosed in the cited references. The present invention provides an inflator design incorporating a nozzle, wherein the design is simpler, more compact, and easier to manufacture than the devices disclosed in the cited references.

Applicants submit that, as claim 1 is deemed patentable, claims 2-6 are also patentable as they depend from claim 1. Also, as claim 7 is deemed patentable, claims 9-13 are also patentable as they depend from claim 7. Also, as claim 14 is deemed patentable, claims 15-22 are also patentable as they depend from claim 14. Also, as claim 23 is deemed patentable, claims 24-26 are also patentable as they depend from claim 23. Also, as claim 27 is deemed patentable, claims 28-29 are also patentable as they depend from claim 27. Also, as claim 30 is deemed patentable, claims 31-34 are also patentable as they depend from claim 30.

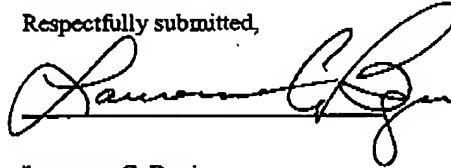
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In view of the above amendments and remarks, the Applicants respectfully submit that all rejections of record have been overcome. The Applicants respectfully requests favorable reconsideration and allowance of the present application.

Applicant has not calculated a fee due in connection with this paper. The Commissioner is authorized to charge any deficiencies to Deposit Account No. 50-3238.

Respectfully submitted,



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